Attorney Docket No.: COOL-01600

## Amendments to the Specification:

Please replace the paragraph on page 7, line 20, to page 8, line 6, with the following amended paragraph:

Figure [[1]] 1A is a side cross-sectional view of a portion of a heat exchanger 110 coupled to a heat-generating source 180. The heat exchanger 110 comprises a manifold layer 101 and an interface layer 105. The manifold layer 101 comprises a surface having a plurality of apertures 101A-E and a plurality of solid portions 101J-M. The interface layer 105 comprises a plurality of narrowing trenches 105A-D and is coupled at a bottom surface to the heat-generating source 180. Each narrowing trench is defined by a sloping sidewall, a substantially planar floor, and a second sloping sidewall. Each trench is narrowing in that a cross-sectional area at an upper plane of a trench is larger than a cross-sectional area at a bottom plane of the trench, realized, for example, by sloping sidewalls. As described in more detail below, the plurality of apertures 101A-E, the plurality of solid portions 101J-M, and the narrowing trenches 105A-D define flow paths or channels that can accommodate the flow of a cooling material. The cooling material comprises a fluid, such as a liquid, a vapor, air, or any combination of these. Circulating the cooling material in a narrowing trench above the heat-generating source 180 will cool that heat-generating source 180 at an area below the narrowing trench.